Grevillea,

A MONTHLY RECORD OF CRYPTOGAMIC BOTANY AND ITS LITERATURE.

NOTICES OF NORTH AMERICAN FUNGI.

By THE REV. M. J. BERKELEY, M.A., F.L.S. (Continued from Page 150.)

* Corticium giganteum. Fr.—Rav. Fasc. ii., 38. No. 3659. Louisiana, Dr. Hale. Rav. No. 1244. On pine logs.

251. Corticium polyporoideum. B. & C.—Subiculo tomentoso candido marginem angustum formante; hymenio pulverulento, pallide alutaceo. No. 4559. Alabama, Peters.

Effused irregular; subiculum white, well-developed tomentose projecting beyond the pale tan-coloured pulverulent hymenium and forming a narrow border. Allied to C. Dregeanum. Mont. & B.

252. Corticium siparium. B. & C.—Subiculo spongioso tomentoso pallido; hymenio ochraceo demum fuscescente. No. 5239. Alabama, Peters. On *Liquidambar*.

Subiculum consisting of spongy pallid down; edge slightly turned up; hymenium at first ochraceous, gradually acquiring a brownish tint. If No. 6116, Alabama, Peters, is the same, the hymenium at length becomes much darker and cracks.

* Corticium Auberianum. Mont.-No. 2497. Car. Inf. On Carza. Rav. No. 1369. Ohio, Lea. No. 2030. Appears to be a white variety of the same species.

253. Corticium venosum. B. & Rav.-Late effusum; subiculo tomentoso; hymenio livido-pallido, e fibrillis subiculi parce et late reticulato. Rav. No. 1321.

Spreading widely; subiculum thin tomentose, consisting of interwoven threads; hymenium livid, but pale, marked here and there with wide reticulations, which appear to arise from the subiculum.

* Corticium læve. Fr.-No. 4517, No. 6101. Alabama, Peters. On Liquidambar, 6087. On oak. Rav. Fasc. ii., 59.

254. Corticium Petersii. B. & C.-Rav. Fasc. v., 28. Subiculo tenui tomentoso, pallido hic illic in fibrillas compacto; hymenio alutaceo hic illic lateritio. No. 4509. On the ground in moist places. Alabama, Peters.

Subiculum thin, pallid, tomentose, here and there forming creep-

ing fibres; hymenium pale, tan-coloured, in parts tinged with brick-red.

255. Corticium glabrum. B. & C.—Subiculo radiante byssoideo cito evanido lateritio; hymenio glabro nec velutino concolore. No. 2404, 3719. Car. Inf. On bark.

Subiculum where well-developed, radiating byssoid, but soon vanishing; hymenium brick-red, smooth, not velvety, as in *C. velutinum*.

- * Corticium miniatum. B.—No. 5252. Alabama, Peters. On Liquidambar.
- * Corticium cœruleum. Fr.—Rav. Fasc. iii., 27. No. 1570. Santee River. A very widely diffused species.
- 256. Corticium chrysocreas. B. & C.—Rav. Fasc. v., 27. Subiculo parco flavo; hymenio ex albido fulvo papillato. No. 2933. Car. Inf. 4027. Alabama, Peters. Rav. No. 1536. On pine.

Subiculum bright yellow, thin; hymenium immarginate pallid, or

yellow tinged with tawny.

- * Corticium viticola. Fr.—Rav. Fasc. iii., 34.
- 257. Corticium crocicreas. B. & C.—Subiculo amplo, tomentoso, laeteritio; hymenio tenui flavo. No. 4542. On vine. Alabama, Peters.

Subiculum spreading widely, bright saffron yellow; hymenium thin, more or less yellow. A curious species.

- * Corticium albido-carneum. Rav.—Fasc. iv., 14. Thelephora, Schwein.
- 258. Corticium epichlorum. B.& C.—Rav. Fas. v., 24. Subiculo tenui viridi-luteo marginem angustum formante; hymenio olivaceo umbrino demum rimoso. No. 4552, 6118. Alabama, Peters. No. 5240. Al., Peters. On Vaccinium.

The two former are the normal condition. Subiculum thin, yellowgreen, forming a slight margin; hymenium olive-umber, at length

cracked.

259. Corticium filamentosum. B. & C.—Subiculo molli tomentoso fibrilloso pallido; hymenio pulverulento ochraceo, vel subolivaceo. No. 6119. Alabama, Peters.

Subjection consisting of soft tomentose threads, over which the ochraceous or olivaceous pulverulent hymenium forms a thin stratum.

260. **Corticium ephebium**. B. & C.—Subiculo tomentoso pallido; margine secernibili, velutino; hymenio ex ochroleuco rufulo setuloso. No. 6050, 6088, 6089. Alabama, Peters.

Spreading widely. Subiculum tomentose; margin becoming free, velvety, pale, umber; hymenium setulose, as in *C. velutinum*.

261. Corticium flavidum. B. & C.—Subiculo obseleto; hymenio e floccis repentibus ramosis apice sporas flavidas subglobosis botryoideas ferentibus. No. 4084. Penns. Mich. On decayed wood.

Subiculum obsolete; hymenium consisting of branched creeping threads, each branch of which bears at the tip a cluster of dirty yellow subglobose spores.

262. Corticium vagum. B. & C.—Subiculo arachnoideo reticulato flavido subfulvo; hymenio e floccis repentibus apice sporiferis enato, fibrillas ambiente. No. 3240. On pine.

Subiculum forming a reticulate spidery web, round the reticulations of which the hymenium is formed at the top of short processes;

varying from dirty white to pale tawny.

263. Corticium olivascens. B. & C.—Subiculo albo floccoso fibrillas hic illic emittente; hymenio pulverulento olivaceo-luteo hic illic margine albo. No. 6392. Boston, Murray.

Subiculum consisting of white threads, which send out delicate filaments over the bark; hymenium occasionally with a white

border, pulverulent yellow-olive.

264. Corticium prasinum. B. & C.—Rav. Fasc. v., 29. Subiculo parco arachnoideo; hymenio continuo tenui fragili prasino; margine albo. No. 6080. Alabama, Peters. On the ground under Liquidambar.

Subiculum delicate spidery; hymenium thin brittle continuous,

with a white margin when young.

- 265. Corticium chlorinum. B. & C.—Tenue fragile olivaceum demum granulatum. No. 6109. Alabama, Peters. On Abies. Forming a thin, brittle, olive-green membrane, which is at first pulverulent, but afterward rough, with minute papillæ; resembling such Thelephoræ as T. laxa, &c.
- 266. Corticium hypopyrrhinum. B. & C.-Subiculo pyrrhino marginem hic illic tenuissimum formante; hymenio albido. Rav. No. 1704. Car. Inf. Apparently on vine.

Subiculum extremely thin rufous, sometimes forming a slight

margin; hymenium dirty white at first pulverulent.

267. Corticium cervicolor. B. & C.—Subiculo delicato byssoideo ; hymenioque cervinis. No. 4026. Alabama, Peters. On smooth wood. Fawn-coloured.

Subiculum very delicate byssoid, spreading over the wood, but scarcely forming a distinct margin; hymenium of the same colour, scarcely pulverulent.

268. Corticium martianum. B. & C.—Rav. Fasc. v., 30. Subiculo tenuissimo fulvo; hymenio croceo. No. 6251. Boston, Sprague. Forming little detached patches, very irregular in form. On rough

Subiculum very thin, tawny, covered here and there with the saffron yellow hymenium. Allied to C. peroxydatum, B. & Br. A Ceylon species.

269. Corticium dryinum. B. & C.-Subiculo vix distincto; hymenio crassiusculo rhabarbarino-rufo. No. 5204. Alabama, Peters. On oak. Running over very rough wood, on which it forms an irregular stratum of a deep rufous tint, with a rhubarb-coloured velvety aspect.

* Corticium calceum. Fr.—Rav. Fasc. iv., 15. No. 2312. Car. Inf. No. 3914. Texas, C. Wright. No. 4263. Penns., Michener. On Vine. Rav. No. 1817. Car. Inf. On pine logs. No. 1797. On Leucothoe coriacea.

270. **Corticium hepaticum.** B.& C.—Latissime effusum; margine hic illic reflexo tenui subtus albido; hymenio continuo hepatico. No. 5989. Penns., Michener. On ash.

Very widely effused, running over the rough wood, and surrounding any projecting point; edge thin, white beneath, here and there free; hymenium liver-coloured, with somewhat the aspect of that of *C. viscosum* or *C. lividum* when dry.

271. Corticium tremellinum. B. & Rav.—Tremelloideum albidum, siccum rufescens ambiens. Rav. No. 1649. Car. Inf. 1754. Cotoosa Springs, Georgia. No. 6393. Wisconsin, Lapham.

On the ground running over whatever it meets with. Dirty-white gelatinous tremelloid; rufous, hard and horny when dry.

272. Var. reticulatum. Fuciforme fasciculatum reticulatum. No. 3942. Penns., Michener.

Imitating in form *Podisona macropus*, forming erect fucoid tufts, reticulated below.

273. Corticium cremoricolor. B. & C.—Mycelio albo innato; hymenio immarginato rimoso areolato, hic illic papillato. No. 5205. Alabama, Peters. On Ilex.

Mycelium white innate; hymenium cream-coloured when fresh, soon cracked into largish arcolæ, here and there papillose.

274. Corticium lilacino-fuscum. B. & C.—Effuseum; margine angusto albo; hymenio lilacino fusco demum rimoso. No. 5610. C. Wright, Connect.

On smooth wood, over which it forms a thin stratum, with a narrow white border arising from the subiculum; hymenium lilac, tinged with brown, at first even and paler, then cracked, shewing the white subiculum. No. 5608. Conn., C. Wright. Appears to be a form of the same species, *Corticium pauperculum*, B. & C.

275. Corticium molle. B. S. C.—Linn. Soc. Journ., p. 336. Rav. Fasc. iii., 29. Effusum immarginatum armeniaco-rufum; subiculo pallidiore; hymenio glaberrimo nitido. No. 2718, 2936. Car. Inf. 4869. On Vine. 5089. Alabama, Beaumont, No. 5186. Alabama, Peters. Also Cuba.

Subiculum pale, sometimes byssoid, rarely extending beyond the hymenium, which is very smooth, and even varying from apricot colour to deep rufous.

ON CYSTIDIA.

By M. Anton de Bary.*

In the Hymenomycetes the organs of the male sex have been the object of many researches. J. Hedwig† thought that he had found their seat in the ring, the striæ and scales of the stipe of pileate Fungi, and he took to be sexual organs the corpuscles accumulated on these several parts, but which, according to his own descriptions, could only have been the spores fallen from the

hymenium.

Long before this Micheli had seen on the hymenium of a Coprinus particular vesicular organs, and he had perhaps also (for the fact does not seem to me without doubt) noticed the same vesicles in other Agaricini, as "apetalous flowers, naked and consisting only of a single filament." Bulliard, in his "Champignons de la France' (vol. i., p. 39-50), also considers these organs to be a sexual apparatus and a sort of spermatic vesicles. They have since been differently described by several authors. They are qualified as "cystidia" by M. Leveille, as "paraphyses" by M. Phæbus, but to Klotzsch and Corda t they are positively antheridia, anthers, or pollenidia. M. Hoffmann & has more recently devoted a special memoir to them. They are found in the greater number of the fleshy Hymenomycetes, but, according to M. Phæbus, their presence is not constant in several species, such as Agaricus lateritius and Ag. geophilus and Cantharellus aurantiacus. seems they have not yet been met with in the *Hydnei* and the *Clavariæ*. The hymenium of the *Hymenogastri* presents a few, and, doubtless, the paraphyses which I have noticed in Geaster hygrometricus are analogous to them. The cystidia are large cells which are especially recognized by their projecting, more or less, on the surface of the hymenium. They have besides the same direction and the same scat as the basidia. Their form and dimensions vary much according to the species under observation. They are generally constant and characteristic for each species, but they are less so for the genera or subgenera. Among the most remarkable of them we must especially mention the large cystidia which are thought to be common to all the Coprini, and which are oval or elongated cells, obtuse, and sufficiently large to be visible to the naked eye. In other cases the cystidia are cylindrical, clavate, lageniform, obtuse (in Polyporus umbellatus according to Corda, and Agaricus viscidus, L., according to Phæbus), pointed or capitate (in Lactarius, Russula, and Boletus according to Corda). cystidia are simple, sometimes branched and cylindrical, capilliform,

^{*} Translated from the 5th Chapter of De Bary's "Morphologie und Physiologie der Pilze."

[†] Theoria general, et fructif, Plant, Crypt. ‡ Icones Fungorum, vol. iii., p. 44.

[§] Botanische Zeitung (1856), p. 137.